SECTION III CAPITAL IMPROVEMENT PROJECT MANAGEMENT SYSTEM PROCESS

The following is a synopsis of the steps involved in this proposed Project Management System. On occasion, on a project specific basis, County staff may modify the process depending on the type of contract (e.g., traditional, design-build, etc.) established by the Board. However, in no case will any modification be authorized by the appropriate responsible party which may be detrimental to the overall positive outcome of the project.

Most of the steps, as outlined in the flow chart marked Exhibit 1, are typical of the traditional Project Management Process. However, several unique ideas have been added to enhance the process. While the list is not all inclusive, it is designed to provide a general framework upon which to customize a sound Capital Improvement Project Management System for Bay county.

Step 1. Project Identification, Evaluation, and Funding During the Annual Budget Process

The Budget Office is responsible for coordinating the preparation of the County's Five-Year Capital Improvement Program (CIP). As a general rule, a Capital Improvement Project is any item in excess of $25,000 with a life span of more than one year. This Capital Improvement Program is reviewed annually and projects are reprioritized based upon current circumstances. Those projects receiving the highest priority, with identified funding sources, are included in the annual budget process for the upcoming fiscal year. Each project recommended for consideration includes an overview/summary, cost estimate, revenue source, and map identifying the location of the improvement. All capital improvement projects identified in the CIP with an estimated construction cost in excess of $250,000 and other projects as identified by the County Manager (or designee) should follow the steps outlined in the Capital Improvement Project Management System.

Step 2 Develop Plans and Specifications for the Project

Utilizing the traditional construction process, projects which have been identified in the Capital Improvement Program will have plans and specifications developed that precisely identify the substance of the project. When the Design-Build Construction process is utilized, a modified system will be used. Incomplete or ambiguous plans and specifications typically result in poor construction, higher cost, and frequently litigation. Responsible contractors prefer concise/tight specifications as this provides them an opportunity to more accurately project job cost. Generally, contractors prefer to know what is expected, rather than guessing at what is intended by the specifications. Integral to this detailed approach is the consistency and firmness with which the Consulting Engineer/Project Manager and Inspectors enforce the provisions of the contract.

It is important to have clear interpretation of technical provisions. Specifications should be written so they can be interpreted simply and easily, but this does not always occur. The same words may mean different things to the Owner, Consulting Engineer/Project Manager, and Contractor. When the meaning is in dispute, the decision will usually be

against the one who prepared the contract. When a dispute arises, the judge or arbitrator usually tries to find the intent of the parties at the time the contract was signed.

If a dispute arises, one should ask three things:

1. Is the Owner justified in his claim?
2. Did the Contractor's estimate include all the work?
3. Should the Contractor's estimate have included all the work?

How one interprets these questions will reflect how the issue will be resolved. All disputes should be handled in a consistent manner regardless of the cause. General and special provisions contained in contract documents normally provide for such consistencies.

In addition, the Consulting Engineer/Project Manager is expected to verify and clarify all printed material supplied by manufacturers containing ambiguous provisions. The Consulting Engineer/Project Manager can assume a warranty where a manufacturer makes statements as to the application of a product and the specifications are followed. In these instances, the Contractor has the right to rely on the knowledge of the Consulting Engineer/Project Manager.

The bid specifications establish the timetable for the construction of the project as recommended by the Consulting Engineer/Project Manager. In addition, the Purchasing Agent may solicit, as an alternative in the process, modifications to the timetable to assess potential cost savings associated with varying timeframes for completion of construction.

The importance of standard specifications is to minimize misunderstandings and reduce construction costs. Requisites for good specifications include clarity, specificity, and tight control of work. Various types of specifications for projects can be utilized. These include:

1. Performance Specifications

    a. The results of the product are more important than the product itself.

    b. Specific end product capabilities, not method of construction.

2. Descriptive Specifications

    a. Describes precisely what is needed.

    b. Covers every detail to the end product.

3. Brand Name Specifications

    a. Specified by manufacturers name and model number.

    b. A product has been determined desirable based on past performance.

4. Closed Specification

    a. Two general types

        i) Single Product – e.g. compac computers
        ii) Multi product – e.g. compac computers, Dell computers

    b. Generally brand name specifications

5. Open Specifications

    a. All manufacturers whose product meet the performance or description specified may bid.

    b. All performance specifications and all descriptive specifications are open specifications.

    c. Brand name specifications are open specifications if the phrase “or equal” is added.

    d. The phrase “or equal” establishes the brand name as a standard and all equal products are acceptable.

6. Reference Specifications

    a. The item desired is referred to by a number as established in a published specification or standard.

    b. Should use national specifications and standards.

    c. Be sure to read and understand what is referenced.

    d. A reference specification may include a number of different items. Be specific.

7. Combination Specifications

    a. Not possible to combine open and closed specifications.

    b. Can combine performance, descriptive, and reference specifications.

    c. Used in describing a product that must meet both physical and performance criteria.

    d. Be positive the combination will produce the desired result.

When preparing the bid specifications, it is important to discuss liquidated damages. Whenever possible, the bid specifications should include a specific amount for liquidated damages in accordance with the provisions of this paragraph. The term “liquidated damages” means a sum agreed upon by the County and the Contractor at the time of entering into a contract, payable to satisfy any loss or injury flowing from a

breach of their contract. The County and the Contractor may stipulate, in advance, the amount to be paid as compensation for injury which may result from a breach, and a stipulated sum is enforceable if such sum is determined to be liquidated damages rather than a penalty. However, the sum stipulated must, under the circumstances, be reasonable and the damages in their nature uncertain, and it must be apparent that it was the intention of the parties to provide in fact for liquidated damages and not for a penalty.

Lastly, the Risk Manager is to be included in all aspects of the project from the initial planning phase to finalization of contract documents, and throughout the construction process, so as to ensure the appropriate insurance documents are in force and remain as such for the duration of the project (see Appendix B for standard requirements).

Step 3. Advertise Project for Bid (Notice to Bidders)

The bid advertising should include a description of the work, principal quantities, the date, time, and place to which contractors can return their bids, a name and address of a contact person for the project, and information regarding pre-qualification (see Appendix A). All bids will be sealed and opened in a public setting. The "public process" is designed to provide responding bidders with an opportunity to observe the process and instill confidence in the system while providing safeguards for the local government as well as the competitive bidders. Bay County will provide notice to bidders, asserting its intention to 1) select the most responsive bidder, and 2) negotiate an agreement most beneficial to Bay County for services provided. The key to good advertisement for bids is to keep the advertisement simple, and publish the notice in newspapers, trade papers, etc., to attract the most qualified bidders. The notice to bidders assures uniformity of information to all interested bidders. Some other important items to include in notice are requiring a certified check or Bid Bond (Bid Bond requirements) where appropriate, prequalification data, requirement for documentation of payment of County Property Tax, information on withdrawal of proposals and the penalties associated herein, and any requirement for attending pre-bid meeting.

Step 4. Conduct Pre-Bid Conference with Interested Parties

To assist prospective bidders in fully understanding the scope of the project, pre-bid conferences will be conducted, as necessary, on CIP projects over $250,000. This pre-bid process allows the Owner, Consulting Engineer/Project Manager and interested parties (synopsis of roles provided in Appendix C) the opportunity to discuss unique aspects of the project in a group setting where all answers to questions are universally received. Additionally, all questions received after the pre-bid conference, but prior to the bid submittal date, must be received in writing. If questions warrant changing bid documents numbered Addendum's will be issued and an acknowledgement will be required from bidders. Copies must be provided to all pre-bid conference attendees.

Step 5. Conduct Pre-Award Analysis and Negotiate with Most Responsive Bidder/Bidders

Prior to recommending award of the most responsive bidder to the governing body, it is appropriate to negotiate with the most responsive firm the basis for their bid submittal. Bay County may establish an in-house peer review process and/or direct the Consulting Engineer/Project Manager to analyze the bid from quantities specified to profit margins

to ensure that the scope of the project is fully realized and can be completed within the submitted proposal. This pre-award process affords another opportunity for the Owner and/or Consulting Engineer/Project Manager to discuss with the most responsive Contractor the scope, methodology, time schedule, etc. of the project. This pre-award technique also minimizes the opportunities for misunderstandings and potential change orders at a later date. The County may allow a bidder to withdraw due to mistakes in bidding and/or errors in judgement. Should the County allow a bidder to withdraw their bid, then the County and/or its Consulting Engineer/Project Manager will proceed to the next most responsive bidder and begin a similar process.

Lastly and prior to formulating a recommendation for the most responsive bidder, it is important to review and identify any unique circumstances surrounding this project, such as acquisition of easements, right-of-entry, permission forms, etc., which may delay the project once approval is provided.

Step 6. Formulate Recommendation for County Manager's Approval and Forward to County Commission for Appropriate Bid Award

Upon completion of the negotiated agreement, the Consulting Engineer/Project Manager will forward, through the appropriate Department Director, to the County Manager their recommendation for the specific project. This recommendation should include a summary of the project, a comparison to the Engineer's estimate, a complete tabulation of all submittals, and the resulted negotiated agreement. The Department Director assigned to this project will convert the recommendation letter into a BCC Memo for the County Manager's signature including how the project is to be funded and a timeframe for completion, along with any other unique information associated with the project. The Budget Officer, Purchasing Agent, and Risk Manager must concur with the Department Director responsible for the project. With the project package completed and submitted for consideration, County staff will be prepared to discuss the item at the designated County Commission meeting to the level requested by the Board. Any interested party (e.g. engineer, contractor, etc.) involved in a Capital Improvement Project with Bay County may appeal to the Board of County Commissioners any decision of the County Manager.

Step 7. Issue Notice of Award

Upon approval by the County Commission, the Department Director, representing the County Manager on the project, will issue the Notice of Award to the successful vendor. Following a Notice of Award, the most responsive bidder will be requested to submit the required Performance Bond, proof of insurances, etc., as defined by the Purchasing Agent, Risk Manager, etc. in the contract documents.

Step 8. Finalize all Required Insurances, Bonds, etc. as Necessary for the Project

Insurance and bonds are critical to protecting the County's interests during the construction phase and any subsequent warranty period of the project. While some insurance requirements will be standard for major capital projects, different types of projects may require different types of insurance and/or different coverage amounts. The exact insurance requirements for each project are identified by the County's Risk Manager as part of Step 2 above (preparation of bid specifications). These insurance

requirements must be met and placed into effect by the Contractor prior to the County issuing a Notice to Proceed for the work. Proof that the necessary insurance has been obtained, typically copies of the policies, are forwarded by the Contractor to the Project Manager/Consulting Engineer, who will then forward these policies to the Risk Manager for review and recording. The Risk Manager will confirm that all required insurance is in place and will track the expiration dates of the various insurances. If policies are set to expire before the project is completed, the Risk Manager will notify the Project Manager/Consulting Engineer approximately 30 days prior to expiration so that the Contractor can be reminded to renew the policy at least through the end of the project. Copies of the renewed policy must be forwarded to the County prior to the expiration date.

Bid Bonds are typically required to be included in each contractor's bid proposal. Bid Bonds will be returned to the unsuccessful bidder(s) after the Notice of Award is issued. Performance Bonds are typically required for any major construction project. This bond provides the Owner with an avenue of financial recourse should the contractor not complete the project or demonstrate an inability to properly manage and/or construct the project in accordance with the specifications. The Bond can provide the funding needed by the County to hire another Contractor or pay for services necessary to properly complete the work. The Contractor must submit a sealed copy of the Performance Bond to the Project Manager/Consulting Engineer for review and approval prior to the Notice to Proceed being issued. The Performance Bond becomes an integral part of the final contract documents and will remain in effect and in the possession of the County until the successful completion of the project. Warranty or Maintenance Bonds, if required by the project specifications, will be executed prior to final project closeout and will be held by the Project Manager/Consulting Engineer until the end of the bond period. These Bonds will then be returned to the Contractor.

Once all insurance and Bond documents are in place and have been officially recorded as part of the contract documents, the Clerk of the Court will provide a copy of the entire recorded contract documents package to the Project Manager/Consulting Engineer, Purchasing Agent, and Contractor.

Step 9. Conduct Pre-Construction Meeting

The Consulting Engineer/Project Manager should prepare an agenda summarizing the principal items to be discussed on the project. Correspondence should be forwarded to all affected parties, municipalities, and utility providers in the project area. Also, the Risk Manager should meet with the successful Contractor and Project Manager/Consulting Engineer to clarify any insurance issues and safety inspections.

Step 10. Issue Notice to Proceed

Once the Department Director has acquired all required information, they can issue the Notice to Proceed. The Notice to Proceed should reference the specific contract documents and generally include the starting date of the project and the number of working days permitted. The Notice to Proceed should be copied to the Budget Office and Finance Office, who may assist in managing the financial aspects of the project. Additionally, copies should be provided to the Clerk of the Court, the County Attorney, the Purchasing Division, the Risk Manager (who will be responsible for monitoring the compliance on all insurances), and the Consulting Engineer/Project Manager.

Step 11. Successful Vendor Begins Project Construction

Having completed the items in the previous ten steps, the Contractor is prepared to begin construction. During construction the Consulting Engineer/Project Manager shall (see Appendix D for sample forms):

1. Consult with and advise the Owner and act as his representative as specified in agreement between the Owner and the Consulting Engineer/Project Manager.

2. Make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed work and to determine in general if such work is proceeding in accordance with contract documents.

3. Perform day to day resident inspection if required by agreement.

4. Review and approve shop drawings and other submittals.

5. Issue all instructions of Owner to contractor and provide necessary interpretations and clarifications of the contract documents.

6. Prepare change orders as required.

7. Based on on-site observations and review of applications for payment, determine amounts owing to contractor and recommend payment to Owner.

8. Conduct an inspection to determine if the project is substantially complete and a final inspection to determine if the work is complete in accordance with contract documents and if contractor has fulfilled all his obligations.

9. Recommend in writing final payment and give written notice to Owner that work is acceptable.

Step 12. Appropriate Engineering/Inspection Services During Construction

The Consulting Engineer/Project Manager or his designated representative shall perform construction observation which shall include the following five phases of inspection:

1. Preparatory inspection. This should be performed prior to beginning any work on any definable feature of work. It should include a review of contract requirements; a check to assure that all materials and/or equipment have been tested, submitted, and approved; a check to assure that provisions have been made to provide required quality control testing; examination of the work area to ascertain that all preliminary work has been completed; and a physical examination of materials and equipment to assure that they conform to approved shop drawings or submittal data and that all materials and/or equipment are on hand.

2. Initial inspection. This should be performed as soon as work begins on a representative portion of the particular feature of work and should include examination of the quality of workmanship and should include a review of quality control testing for compliance with contract requirements.

3. Follow-up inspections. These shall be performed daily to assure continuing compliance with contract requirements, including quality control testing, until completion of the particular feature of work.

4. Substantial completion inspection. This shall be performed upon notification by the contractor that the project is substantially complete. A punch list shall be prepared to document all work required in order to conform to contract requirements.

5. Final inspection. This shall be performed upon notice by the contractor that punch list items have been corrected and upon personal observations which indicate that all work has been completed in accordance with contract documents.

Inspection reports must be completed on a daily basis and/or a diary maintained which documents the contractor's progress and activities. As a minimum, this documentation shall include:

1. Phase or phases of construction underway during the timeframe of the report.

2. Type and number of inspections or tests that were made.

3. Results of inspection, including nature of deficiencies observed and corrective actions taken or to be taken. If no inspections are listed on the report, it must be assumed that no inspections were made.

4. Report of tests performed, including those specified, with the results of the tests, including failures and remedial action to be taken. Test results should be attached to the report form. Where test results cannot be completed by the time the report is submitted a notation should be made that the test was performed and the approximate date test results will be available. Delayed test results should be submitted with the report form on the date received.

5. Other information may be required on the report for activities affecting quality control and construction documentation. These items may/shall include:

    A. Data on weather conditions.

    B. Contractor or subcontractor operations, during the reporting period, and their respective areas of responsibility.

    C. Surveillance of shop drawings and submittal requirements.

    D. Monitoring of materials and equipment upon arrival at the job site for compliance with submittal approvals, damage during transit, and proper storage.

E. Job safety.

F. Number and types of vehicles/equipment on project.

G. Documentation of any delays and/or change requests.

H. Federal, State and local government visitors.

6. The report must contain a record of inspections and tests for all work accomplished subsequent to the previous report.

7. In all cases the report or reports must be verified and signed by the Consulting Engineer/Project Manager. The verification should contain the statement that all supplies and materials, incorporated in the work, are in compliance with the terms of the contract except as noted. Reports should be reviewed promptly by the Owner. Discrepancies should be resolved immediately.

8. The Risk Manager will also inspect and monitor the safety/insurance aspects of the project.

All Capital Improvement Projects in excess of $250,000 will have formal meetings scheduled throughout the process. The schedule will be approved by the Department Director.

County staff will periodically summarize outstanding Capital Improvement Projects at intervals necessary to keep the Board apprised of the project.

Step 13. Post Construction Evaluation

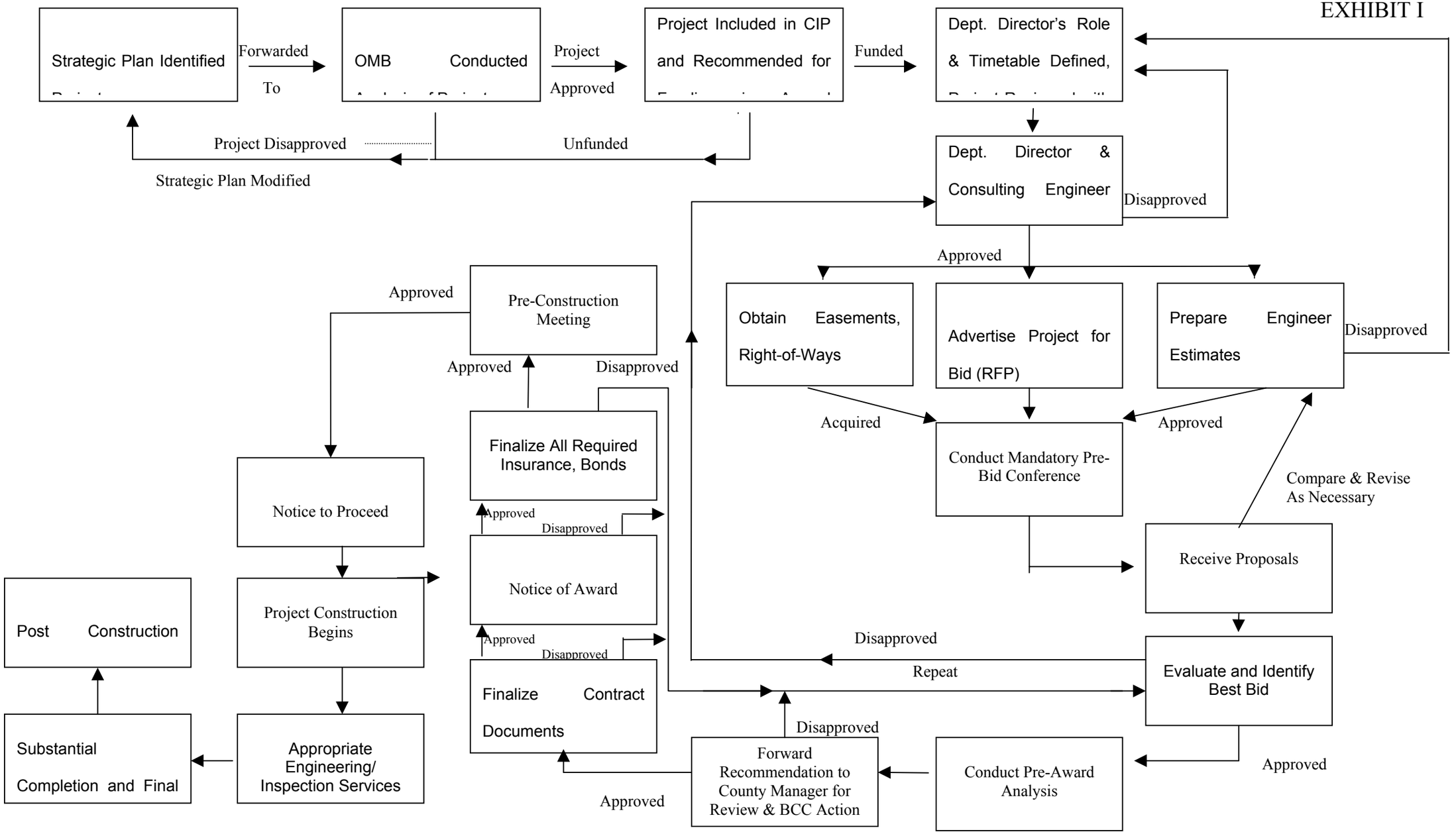
With the project's construction complete, it would be beneficial for the Owner, Consulting Engineer/Project Manager, and Contractor to review how the project has been managed, designed, and constructed. This review will identify areas of excellence, as well as those in need of improvement. This 360º evaluation provides an opportunity for the Owner to grade the Consulting Engineer/Project Manager on their design for accuracy and thoroughness, as well as the Contractor for performance (e.g. completed on time, within budget, etc.). Additionally, the Consulting Engineer/Project Manager and Contractor would also evaluate each other on similar criteria to ascertain the quality of the product the public is receiving.

The evaluation system will be based upon points, with a minimum score of 80 percent required for either the Consulting Engineer/Project Manager and/or Contractor to be eligible to perform additional services for Bay County. Standard forms for post-construction evaluation are included at Appendix D for Consulting Engineer/Project Manager and Contractor. The Contractor evaluation forms are for Public Works projects and for Non-Public Works projects. For Contractor, project management and project performance shall be equally weighted. For Consulting Engineer/Project Manager the weighting shall be 50/50 (design/construction management) for projects where Consultant is the designer as well as Construction Manager. No weighting will be applicable for firms that only provide services during construction. If either the Consulting Engineer/Project Manager or Contractor scores less than the expected level,

they will receive written notice of this deficiency. This notification will explain the basis of the deficiency and that should this occur again within the next 24 months, the Consulting Engineer/Project Manager and/or the Contractor may be excluded (for a period of 12 months) from participating in the County's bid process.

This post construction evaluation becomes the foundation upon which Consulting Engineers/Project Managers and Contractors are pre-qualified for future work based on past performance.

EXHIBIT I


Strategic Plan Identified
Forwarded To
OMB Conducted
Project Approved
Project Included in CIP and Recommended for
Funded
Dept. Director's Role & Timetable Defined,
Project Disapproved
Unfunded
Strategic Plan Modified
Dept. Director & Consulting Engineer
Disapproved
Approved
Obtain Easements, Right-of-Ways
Advertise Project for Bid (RFP)
Prepare Engineer Estimates
Disapproved
Approved
Pre-Construction Meeting
Approved
Disapproved
Acquired
Approved
Finalize All Required Insurance, Bonds
Conduct Mandatory Pre-Bid Conference
Compare & Revise As Necessary
Notice to Proceed
Approved
Disapproved
Receive Proposals
Post Construction
Project Construction Begins
Notice of Award
Approved
Disapproved
Disapproved
Repeat
Evaluate and Identify Best Bid
Finalize Contract Documents
Disapproved
Substantial Completion and Final
Appropriate Engineering/ Inspection Services
Forward Recommendation to County Manager for Review & BCC Action
Conduct Pre-Award Analysis
Approved
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